

REMARKS

The Applicant respectfully requests reconsideration in view of the following remarks.

The applicant has incorporated claim 7 into claim 1. The applicant has deleted the definition of “terphenyl” from claim 7 when they incorporated claim 7 into claim 1. Newly added claim 32 is identical to amended claim 1, except for the applicant using “consisting essentially of” language in claim 32 instead of “comprising” language in claim 1. The applicant has amended claim 31 to overcome the 35 U.S.C. 112, rejection. The applicant has added one claim (claim 32) and cancelled one claim (claim 7). The applicant has amended the specification as suggested by the Examiner. Support for the amendment to the specification can be found in the original claim 20. No new matter has been added.

The applicant appreciates that the Examiner has withdrawn several of the previous rejections. Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Sato et al (US 2003/0218418). Claims 1, 7, 10-14, and 18-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda et al (JP 2004-243298). Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda, as applied to claims 1, 7, 10-14, and 18-31. Claims 1, 7, and 10-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuura et al (US 2003/0157366) in view of Igarashi et al (US 2002/0048689). The applicant respectfully traverses these rejections.

Claim Rejections — 35 USC § 112

Claim 20 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With respect to the rejection of claim 20, the applicant has amended the specification to add the description of original claim 20 into the specification. For the above reasons, this rejection should be withdrawn.

The applicant has amended the dependency of claim 31 to be dependent on claim 1 and deleted the symbol Y and the definition of Y from this claim as the compound in claim 1 no longer contains the symbol Y. The applicant believes that the claim 31 as amended is in compliance with 35 U.S.C. 112 and this rejection should be withdrawn.

Rejection Over Sato

Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Sato. Claim 31 is now dependent on claim 1 and further limits claim 1. Since claim 1 was not rejected over Sato, this rejection should be withdrawn.

Rejection Over Fukuda

Claims 1, 7, 10-14, and 18-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukuda. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuda, as applied to claims 1, 7, 10-14, and 18-31.

As the Examiner has recognized, Fukuda discloses a compound wherein phosphorus is substituted with three terphenyl groups and use of this compound as matrix for phosphorescent emitters (see page 6 of the Office Action). Amended claim 1 requires that “Ar” is phenyl, biphenyl, naphthyl, anthryl, phenanthrenyl, pyrlyl, fluorenlyl, spirobifluorenlyl, dihydrophenanthrenyl, tetrahydropyrenyl or a combination of 2 or 3 of these systems which may be substituted by F or organic radicals having 1 to 40 C atoms. “Ar” now does not include terphenyl in the definition. The applicant believes that since Fukuda does not teach the applicant’s formula A with “Ar” being phenyl, biphenyl, naphthyl, anthryl, phenanthrenyl, pyrlyl, fluorenlyl, spirobifluorenlyl, dihydrophenanthrenyl, tetrahydropyrenyl or a combination of 2 or 3 of these systems which may be substituted by F or organic radicals having 1 to 40 C atoms that these rejections should be withdrawn.

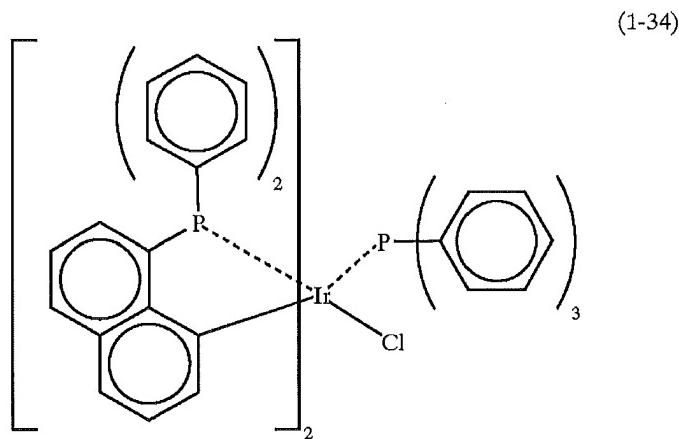
Rejection over Matsuura in view of Igarashi

Claims 1, 7 and 10-31 are rejected as being unpatentable with Matsuura in view of Igarashi. The applicant believes that Matsuura could only be considered as general state of the art, but does not have a direct relation to the present invention. The Examiner is correct at page 11, paragraph no. 39 of the final office action that Matsuura does not teach a host material (matrix material) that comprises phosphorous.

It is furthermore still the applicant’s opinion that the Examiner has not interpret the applicant’s claim 1 correctly in view of Igarashi. Claim 1 is directed to an organic electroluminescent device comprising in the emission layer a mixture of two different materials, i.e. a compound of formula (A), which is the matrix material (host material) and a triplet emitter B.

Igarashi discloses metal complexes having triarylphosphine ligands for use in organic electroluminescent devices. The applicant believes that these compounds are only used as triplet emitters in an OLED, but are not used as matrix material (host material). Furthermore, Igarashi does not suggest the use of such complexes as matrix material (host material), but only as emission material. The person of ordinary skill in the art would have no motivation whatsoever to use such complexes as matrix material (host material) in a mixture with a further triplet emitter.

The Examiner states that Igarashi disclose metal complexes having triarylphosphine ligands for use in organic electroluminescent devices. However, the Examiner is not correct that compound (1-34) (or any other compound disclosed by Igarashi) is embraced by formula (A) according to amended claim 1. Igarashi's compound (1-34) is as follows:



This would correspond to the formula M-X(Ar)₃ where M in compound (I-34) is Ir.

The applicant's formula (A) is defined as $X(Ar)_3$ wherein X is P, As, Sb or Bi and wherein Ar is phenyl, biphenyl, naphthyl, anthryl, phenanthrenyl, pyrlyl, fluorenyl, spirobifluorenlyl, dihydrophenanthrenyl, tetrahydropyrenyl or a combination of 2 or 3 of these systems which may be substituted by F or organic radicals having 1 to 40 C atoms.

However, the applicant's formula (A) is not defined as a compound wherein the group X is coordinated to a metal M such as Ir, and therefore a compound $M-X(Ar)_3$ is not embraced by formula (A).

Furthermore, neither compound (1-34) nor any other compound disclosed by Igarashi is embraced by formula (A) according to claim 1. Formula (A) is defined as $X(Ar)_3$ wherein X is P, As, Sb or Bi and wherein Ar is phenyl, biphenyl, naphthyl, anthryl, phenanthrenyl, pyrlyl, fluorenyl, spirobifluorenlyl, dihydrophenanthrenyl, tetrahydropyrenyl or a combination of 2 or 3 of these systems which may be substituted by F or organic radicals having 1 to 40 C atoms. The definitions of formula (A) as well as of the symbols X and Ar are self-contained definitions. These definitions do not include the possibility of a metal to be present in the compound of formula (A). Therefore, the Examiner is not correct that the compounds disclosed by Igarashi are embraced by formula (A) of the pending application. Igarashi cannot be considered to have any relation with the present invention.

It is noted that claim 32 uses "consisting essentially of" language and would exclude any ingredient in any amount that materially effects the claimed invention.

A statement that modifications of the prior art to meet the claimed invention would have been “obvious to one of ordinary skill in the art at the time the invention was made” because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See MPEP § 2143.01 IV. “[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Furthermore, the Examiner cannot selectively pick and choose from the disclosed parameters without proper motivation as to a particular selection. The mere fact that a reference may be modified to reflect features of the claimed invention does not make the modification, and hence the claimed invention, obvious unless the prior art suggested the desirability of such modification. *In re Mills*, 916 F.2d 680, 682, 16 USPQ2d 1430 (Fed. Cir. 1990); *In re Fritch*, 23 USPQ2d 1780 (Fed. Cir. 1992). Thus, it is impermissible to simply engage in a hindsight reconstruction of the claimed invention where the reference itself provides no teaching as to why the applicant’s combination would have been obvious. *In re Gorman*, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991).

Therefore, claim 1 as well as the dependent claims, are non-obvious with respect to Matsuura in view of Igarashi. For the above reasons, this rejection should be withdrawn.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 14113-00042-US from which the undersigned is authorized to draw.

Dated: May 18, 2010

Respectfully submitted,

Electronic signature: /Ashley I. Pezzner/
Ashley I. Pezzner
Registration No.: 35,646
CONNOLLY BOVE LODGE & HUTZ LLP
1007 North Orange Street
P. O. Box 2207
Wilmington, Delaware 19899-2207
(302) 658-9141
(302) 658-5614 (Fax)
Attorney for Applicant